

ENVIRONMENTAL ASSESSMENT FOR CONSTRUCTION ACTIVITIES

Authorization No.: TG048663

Reviewer: Environmental Restoration Management/Facilities Operations
Management (ERM/FOM), T891E, x5949.

Date: April 7, 1993

OBJECTIVE:

Clean Ditches and Culverts Plantwide. This report is to serve as an addendum to add Culvert #13 and the ditches to the report completed June 3, 1992, by Tom Ottensman (see attachment #1).

JOB DESCRIPTION:

See attached.

ENVIRONMENTAL ASSESSMENT:

CULVERT #13:

The proposed construction/excavation involving Culvert #13 (see attachment #2) is not located in an Individual Hazardous Substance Site (IHSS) or Toxic Substance Control Act (TSCA) site.

ERM/FOM does not require sampling of the soil and/or water prior to or during construction/excavation activities.

DITCHES:

Many of the ditches to be dressed and cleaned are located in, or themselves comprise an Individual Hazardous Substance Site (IHSS). Those ditches are summarized below. ERM/FOM requires that all dirt, soil, gravel and rock removed from any of the ditches to be cleaned, remain on the banks of the ditch, in the immediate area from which they were originally removed. This material is to be spread and incorporated into the banks. ERM/FOM does not require sampling of the soil and/or water encountered during the construction/excavation activities.

The ditches paralleling Central Avenue are located in or near the following IHSS's (see attachment #1A):

IHSS #191, OU 13, Hydrogen Peroxide Spill (see attachment #3):

A drum of 35% Hydrogen Peroxide flowed into a culvert at the corner of Fifth Street and Central Avenue. The area of the spill is presently paved.

IHSS #157.1, OU 13, Radioactive Site North Area (see attachment #4):

Contamination associated with the handling and steaming of contaminated rags was observed in the soils around Bldg. 442. This contamination included uranium, beryllium, solvents, and radioactive metal shavings, which could have been released into the Central Avenue Ditch.

IHSS #187, OU 12, Sulfuric Acid Spill (see Attachment #5):

Some 1500 gallons of acid leaked from a tank located east of Bldg. 443, and flowed east. Some of the spill may have entered the Central Avenue ditch east of Bldg. 442.

IHSS #152, OU 13, Fuel Oil Tank 221 Spills (see attachment #6):

Past spills of No. 6 fuel oil from the tanks located on the southwest corner of Central Avenue and Seventh Street have flowed into the Central Avenue ditch.

IHSS #117.3, OU 13, Chemical Storage - South Site (see attachment #7):

Spills from a storage site located at the site of present fuel tanks 221 and 224 consisted of oils containing plutonium.

IHSS #190, OU 13, Caustic Leak (see attachment #8):

Past spills of sodium hydroxide have flowed into the Central Avenue ditch.

IHSS #113, OU 2, Mound Area (see attachment #9):

Contaminated combustible wastes, and organic liquid wastes with uranium and plutonium elements were placed in the Mound Area. The Central Avenue ditch flows through this area.

IHSS #162, OU 14, Radioactive Site - 700 Area Site #2 (see attachment #10):

Some radioactive contamination was detected in an excavation located along Eighth Street and Central Avenue. Some residual contamination may have entered the Central Avenue ditch.

IHSS #172, OU 8, Central Avenue Waste Spill (see attachment #11):

A leaking drum on a truck spilled radioactive contaminated solvents along portions of Central Avenue, some of which may have reached the ditch.

IHSS #108, OU 2, Trench T-1 (see attachment #12):

Drums of depleted uranium chips and lathe coolant were buried in a trench approximately 200 feet long, 15 feet wide, and 5 feet deep. This trench is only a few feet south of the Central Avenue Ditch.

IHSS #153, OU 2, Oil Burn Pit (see attachment #13):

Drums containing oil contaminated with uranium were burned in an open pit located north of Central Avenue and adjacent to the present Central Avenue ditch.

The ditches paralleling Sage Avenue are located in or near the following IHSS's (see attachment #14):

IHSS #128, OU 13, Oil Burn Pit No. 1 (see attachment #15):

Contaminated oil was burned in a pit located north of Bldg. 331, and the pit was later backfilled.

IHSS #134, OU 13, Metal Disposal Site North Area (see attachment #16):

Reactive metals were burned in this area, part of which is now covered by Sage Avenue.

IHSS #156.1, OU 14, Bldg. 371 Parking Lot (see attachment #17):

At one time contaminated soils may have been piled in the area now covered by the 371 parking lot.

IHSS #186, OU 13, Valve Vaults 11, 12, and 13 (see attachment #18):

Process wastes consisting of Oakite, solar pond water, and various radioactive acidic liquids have leaked into valve boxes and the surrounding soils. Some of

this contamination could have entered the ditch along the east side of Bldg. 371 parking lot.

Potential Area of Concern (PAC) #300-707, Sanitizer Spill (see attachment #19):
Approximately three gallons of sanitizer consisting of water and formaldehyde were spilled on the shoulder of the road at Sixth Street and Sage Avenue.

The ditches paralleling Seventh Street (north of Central) and 51 Drive are located in the following IHSS's (see attachment #20):

IHSS #117.2, OU 13, Middle Site Chemical Storage (see attachment #21):
Leaks and spills in this area have consisted of acids, oils, soaps, solvents, beryllium scrap, and aluminum nitrate. Any of these contaminants could have entered the drainage ditches.

IHSS #158, OU 13, Radioactive Site - Bldg. 551 (see attachment #22):
Residual contamination from leakage of waste boxes loaded onto railroad cars in the vicinity of Bldg. 551 could be present in the drainage ditches. Uranium is the contaminating constituent.

IHSS #169, OU 13, Waste Drum Peroxide Burial (see attachment #23):
Hydrogen Peroxide spills drained into a culvert at the corner of Fifth and Central Avenue, were diluted with water and buried.

The ditches paralleling Cottonwood Avenue, 44 Drive, and Seventh Street south of Central Avenue are located in the following IHSS's (see attachment #24):

IHSS #157.2, OU 12, Radioactive Site South Area (see attachment #25):
Numerous incidents of contamination releases are associated with the area around Bldg. 444. These contaminants include uranium, beryllium, solvents, and oils. The drainage ditches around the area could contain these contaminants.

IHSS #189, OU 12, Nitric Acid Tanks (see attachment #26):
Nitric acid spills have occurred in the area of the railroad tracks east of Bldg. 444, and may have contaminated soils since washed into the drainage ditches.

IHSS #160, OU 14, Radioactive Site - 444 Parking Lot (see attachment #27):
Uranium and plutonium, as well as oils and solvents, have previously been stored in the area now utilized as the 444 parking lot; and may have entered the drainage ditches east of the lot.

IHSS #136.2, OU 12, Cooling Tower Pond East of Bldg. 444 (see attachment #28):
Cooling tower cleansers were contained in ponds east of Bldg. 444 and allowed to evaporate, at which time the ponds were backfilled. The cleaning agents may have contained chromium and lithium.

IHSS #117.3, (see attachment #7 above).

WETLANDS AND ENDANGERED SPECIES:

Not applicable, per Claire Reno, NEPA Division.